

Postprocessing

Boundary conditions

Nodesets, sidesets

Element blocks, element types

Viewing blocks and sets

Genesis export

Hardcopy

Boundary Conditions

Cubit does not specify the type of boundary condition, but does allow the user to specify groups of elements, sides or nodes in an EXODUS-II file.

Nodeset - grouping of nodes

Sideset - grouping of element sides

Element block (or block) - a grouping of elements of the same geometry, element type and number of nodes.

Nodesets and Sidesets

nodeset n {vertex|curve|surface|volume|group}
<range>

nodeset 1 curve 1 to 3
check it with "list nodeset 1"

sideset n {curve|surface} <range>

sideset 2 surface 3 to 5
check it with "list sideset 2"

Element Block Specification

define a block:

```
block n {curve|surface|volume|group} <range>
```

specify element type:

```
block <range> elementtype <type>
```

specify attributes:

```
block <range> attribute x
```

Note that higher order elements must be specified before meshing.

Check with "list block n"

Element Types

bar2, bar3
shell4, shell8, shell9
quad4, quad8, quad9
hex8, hex20, hex27

Viewing blocks and sets

`draw block n`

suppresses plots of other objects on the graph and
draws the block

"display" recovers the full graph

`nodeset visibility on`

`draw nodeset n`

display

`sideset visibility on`

`draw sideset n`

display

2D Mesh

Must be in the x-y plane

Specify before meshing

If reading in a FASTQ file, cubit automatically recognizes blocks, sidesets and nodesets.

Genesis Export

```
export genesis 'myjob.exo'
```

This outputs an element block for every meshed volume.

Non meshed volumes are ignored.

Note the quote marks.

If block ID's were not specified, the volume ID is used.

Hardcopy

```
hardcopy 'filename' {encapsulated | postscript | eps}  
[color|monochrome]opt
```

```
hardcopy 'myjob.ps' post
```